

V AMP 1:

1. Test connections:
- For the **V AMP test** measure the V AMP output at PS1 VAMP OUT, and MUX 1 MON connectors on the front panel.

• For the **VAMP/LOCKIN test** observe the LOCKIN output at LOCKIN 1 OUT on front panel and LOCKIN 1 output on the Breakout Box.

• PS1 Bias in conjunction with a detector simulator(a resistor divider network and a FET circuit contained within the breakout box), will provide the input signal.

2. Power up settings:

LOCKIN BYPASS 1:	0(off)
AZ FAST:	1(on)
V AMP FAST:	1(on)
EXT REF 1:	0(off)

3. Test preparation settings:

readfile vamp.macro

Set DAC = 1V

Select the 1kHz ref.:

Filter output:

Undivide output:

Unground QI:

Unselect variable input:

Select Mux 1 output:

PSIDAC(1)

refPS1(0)

filterPS1

divPS1(0)

gndPS1(0)

varPS1(0)

Mux1(Vamp1)

PS1 DAC OUT:	1V
REF SELECT:	0
FILTER:	1(on)
DIVIDE:	0(off)
GND PS1:	0(off)
VARIABLE INPUT:	0(off)

4. V AMP test:

Input settings in Step 3 before starting test.

Turn Phonon Sensor 1 pot. on BOB fully clockwise

For manual input testing:	
Vin = 1Vp-p sine wave	
Enter the following settings:	<i>PSIDAC(0)</i> <i>VarPS1</i>
Vamp out = 1Vp-p	

Is PS1 VAMP OUT a 1kHz sine wave? _____

What is the maximum amplitude of VAMP OUT? _____

Change the potentiometer setting randomly over its range of travel.

Does the amplitude of PS1 VAMP OUT change? _____

Are the Vamp and Mux outputs equal? _____

5. VAMP/LOCKIN test:

Input settings in Step 3 and verify step 4 results before starting test.

Vary pot setting and observe LOCKIN 1 OUT.

Does LOCKIN 1 OUT level change in amplitude with

corresponding changes in the pot setting? _____

BLIP TESTING PROCEDURE **CDMS** **8 Oct. 1998**
VAMP/LOCKIN:BOARD # _____ **STATUS** _____ **DATE** _____

If "NO" then conduct LOCKIN TEST procedures.

Turn on Lockin Bypass: *bypass*

Does the LOCKIN 1 OUT change to a sine wave? _____

Turn off Lockin Bypass: *bypass(0)* Verify return of original output

V AMP 2:

1. Test connections:
 - For the **V AMP test** measure the V AMP output at PS2 VAMP OUT, and MUX 1 MON connectors on the front panel.
 - For the **VAMP/LOCKIN test** observe the LOCKIN output at LOCKIN 2 OUT on front panel and LOCKIN 2 output on the Breakout Box.
 - PS2 Bias in conjunction with a detector simulator(a resistor divider network and a FET circuit contained within the breakout box), will provide the input signal.

Set mux 1 to output PS2 VAMP OUT: *Mux1(Vamp2)*

2. **Power up settings:**

LOCKIN BYPASS 2:	0(off)
AZ FAST:	1(on)
V AMP FAST:	1(on)
EXT REF 2:	0(off)

- ### 3. Test preparation settings:

readfile vamp.macro

Set DAC = 1V	<i>PS2DAC(1)</i>
Select the 1kHz ref.:	<i>refPS2(0)</i>
Filter output:	<i>filterPS2</i>
Undivide output:	<i>divPS2(0)</i>
Unground Q1:	<i>gndPS2(0)</i>
Unselect variable input:	<i>varPS2(0)</i>
Select Mux 2 output:	<i>Mux2(Vamp2)</i>

PS2 DAC OUT:	1V
REF SELECT:	0
FILTER:	1(on)
DIVIDE:	0(off)
GND PS2:	0(off)
VARIABLE INPUT:	0(off)

- #### 4. V AMP test:

Input settings in Step 3 before starting test.

Turn Phonon Sensor pot. on BOB fully clockwise

Is PS2 VAMP OUT a 1kHz sine wave? _____

What is the maximum amplitude of VAMP OUT? _____

Change the potentiometer setting randomly over its range of travel.

For manual input testing:

$V_{in} = 1\text{ V}_{p-p}$ sine wave

Enter the following settings: *PS1DAC(0)*
VarPS1

$$V_{amp\ out} = 1\text{V}_{p-p}$$

BLIP TESTING PROCEDURE **CDMS** **8 Oct. 1998**
VAMP/LOCKIN:BOARD # _____ **STATUS** _____ **DATE** _____
Does the amplitude of PS2 VAMP OUT change? _____
Are the Vamp and Mux outputs equal? _____

5. **VAMP/LOCKIN test:**
Input settings in Step 3 and verify step 4 results before starting test.

Vary pot setting and observe LOCKIN 2 OUT.

Does LOCKIN 2 OUT level change in amplitude with
corresponding changes in the pot setting? _____
If "NO" then conduct LOCKIN TEST procedures.

Turn on Lockin Bypass: *bypass*

Does the LOCKIN 2 OUT change to a sine wave? _____

Turn off Lockin Bypass: *bypass(0)*